

<b>Notice to Comply</b>	Application No. 10/082,973	Applicant(s) Norris, James	
	Examiner Janet L. Epps-Smith	Art Unit 1633	

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

Applicant must file the items indicated below within the time period set in the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☒ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☒ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- ☐ 7. Other:

**Applicant Must Provide:**

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An initial or substitute paper copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the specification.**
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (571) 272-2510

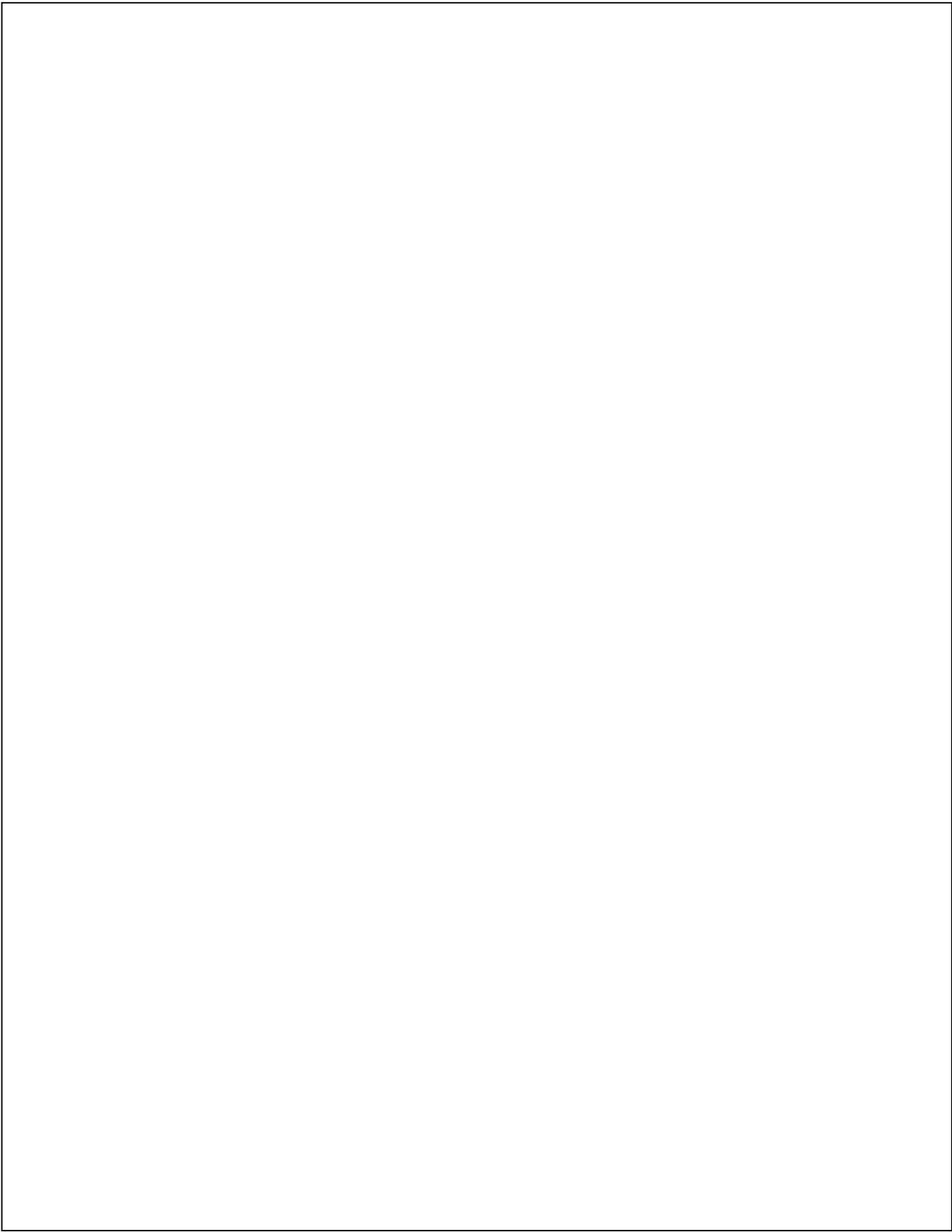
For CRF Submission Help, call (571) 272-2501/2583.

PatentIn Software Program Support

Technical Assistance.....703-287-0200

To Purchase PatentIn Software.....703-306-2600

**PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY**



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Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866)  
217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2009; month=5; day=28; hr=12; min=33; sec=4; ms=333; ]

=====

\*\*\*\*\*

Reviewer Comments:

<140> 10/082,973

2002-02-26

Please insert a <141> at the beginning of the above "2002-02-26" line;  
<141> is a mandatory numeric identifier indicating the current filing  
date.

<210> 8

<211> 56

<212> DNA

<213> E. coli

Please spell out the Genus ("Escherichia") in the above <213> response;  
per Sequence Rules, show the Genus species in that response. Same  
response in subsequent sequences.

<210> 20

<211> 34

<212> DNA

<213> Mus musclus

Please change the above <213> response to "Mus musculus".

<210> 21

<211> 36

<212> DNA

<213> HBV

Please spell out the virus in the above <213> response; same in Sequence

22.

<210> 51

<211> 364

<212> DNA

213> Artificial Sequence

<220>

<223> pSnip ribozyme cassette

Please add an opening bracket ("<") to the above <213> numeric identifier. It must be <213>.

\*\*\*\*\*

Application No: 10082973 Version No: 3.0

**Input Set:****Output Set:**

**Started:** 2009-05-28 10:39:30.012  
**Finished:** 2009-05-28 10:39:33.620  
**Elapsed:** 0 hr(s) 0 min(s) 3 sec(s) 608 ms  
**Total Warnings:** 45  
**Total Errors:** 2  
**No. of SeqIDs Defined:** 73  
**Actual SeqID Count:** 73

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 402	Undefined organism found in <213> in SEQ ID (8)
W 402	Undefined organism found in <213> in SEQ ID (9)
W 402	Undefined organism found in <213> in SEQ ID (10)
W 402	Undefined organism found in <213> in SEQ ID (11)
W 402	Undefined organism found in <213> in SEQ ID (12)
W 402	Undefined organism found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 402	Undefined organism found in <213> in SEQ ID (20)
W 402	Undefined organism found in <213> in SEQ ID (21)
W 402	Undefined organism found in <213> in SEQ ID (22)
W 213	Artificial or Unknown found in <213> in SEQ ID (37)
W 213	Artificial or Unknown found in <213> in SEQ ID (38)
W 213	Artificial or Unknown found in <213> in SEQ ID (39)

**Input Set:**

**Output Set:**

**Started:** 2009-05-28 10:39:30.012  
**Finished:** 2009-05-28 10:39:33.620  
**Elapsed:** 0 hr(s) 0 min(s) 3 sec(s) 608 ms  
**Total Warnings:** 45  
**Total Errors:** 2  
**No. of SeqIDs Defined:** 73  
**Actual SeqID Count:** 73

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (40)
W 213	Artificial or Unknown found in <213> in SEQ ID (41)
W 213	Artificial or Unknown found in <213> in SEQ ID (42)
W 213	Artificial or Unknown found in <213> in SEQ ID (43)
W 213	Artificial or Unknown found in <213> in SEQ ID (44)
W 213	Artificial or Unknown found in <213> in SEQ ID (45)
W 213	Artificial or Unknown found in <213> in SEQ ID (46)
W 213	Artificial or Unknown found in <213> in SEQ ID (47)
W 213	Artificial or Unknown found in <213> in SEQ ID (48) This error has occurred more than 20 times, will not be displayed
E 249	Order Sequence Error <212> -> <220>; Expected Mandatory Tag: <213> in SEQID ( 51 )
W 402	Undefined organism found in <213> in SEQ ID (54)
W 402	Undefined organism found in <213> in SEQ ID (55)
W 402	Undefined organism found in <213> in SEQ ID (56)
W 402	Undefined organism found in <213> in SEQ ID (57)
W 402	Undefined organism found in <213> in SEQ ID (58)
W 402	Undefined organism found in <213> in SEQ ID (59)
W 402	Undefined organism found in <213> in SEQ ID (60)
W 402	Undefined organism found in <213> in SEQ ID (61)
W 402	Undefined organism found in <213> in SEQ ID (62)
W 402	Undefined organism found in <213> in SEQ ID (63)
W 402	Undefined organism found in <213> in SEQ ID (64) This error has occurred more than 20 times, will not be displayed

**Input Set:**

**Output Set:**

**Started:** 2009-05-28 10:39:30.012  
**Finished:** 2009-05-28 10:39:33.620  
**Elapsed:** 0 hr(s) 0 min(s) 3 sec(s) 608 ms  
**Total Warnings:** 45  
**Total Errors:** 2  
**No. of SeqIDs Defined:** 73  
**Actual SeqID Count:** 73

Error code	Error Description
E 250	Structural Validation Error; Sequence listing may not be indexable

# SEQUENCE LISTING

<110> Norris, James S.  
 Clawson, Gary A.  
 Schmidt, Michael G.  
 Hoel, Brian D.  
 Pan, Wei-Hua  
 Dolan, Joseph W.

<120> TISSUE-SPECIFIC AND TARGET RNA-SPECIFIC RIBOZYMES

<130> 14017-0004002

<140> 10/082,973  
 2002-02-26

<150> 09/338,942

<151> 1999-06-24

<150> 60/090,560

<151> 1998-06-24

<150> 60/096,502

<151> 1998-08-14

<160> 73

<170> FastSEQ for Windows Version 4.0

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<211> 492

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<213> Artificial Sequence

<220>

<223> ARN promoter

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gateggcggc gtcggtgcg gggccgggt ctccgcctg ctcgcggtg ccggtccgtg	180
cggccttgcc gtccgcggcg gcgcgcgatg agggcgccac ctgggtggtg atccagccac	240
tgagggtcaa cattccagtc actccgggaa aaatggaatt ctccattgg atcgccccac	300
gcgtcgcgaa cttgagcccc cttttcgtcg ccccttgaca gggtgcgaca ggtagtcgca	360
gttggtttgac gcaagtcact gattggaaac gccatcgcc tgcagaaat ggtcgttgcc	420
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cctagcaagg ac	492

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<211> 1113

<212> DNA

<213> Artificial Sequence

<220>

<223> PROC promoter



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ggtggcaggc	cggcgggagag	gtgcagggtcc	gaagcgcctt	gtttggcact	gaaggcgagc	180
agctcggtaa	tatccatggg	actccccaat	tacaagcaag	caggtagaat	gccgccaaag	240
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atagcagaga	atattgcaaa	ggttgccggc	cgcattccgt	aggcagcgca	agctgcgggg	480
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gccctggccg	aggccgtgaa	gcaactgccc	aacctccgat	tgcgtggcct	gatggccatc	900
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ctgctggacc	tgaaccttgg	cctggacacc	ctgtccatgg	gcattgagca	cgcacctcag	1020
gcagccatcg	gcgaagggtc	gacctgggtc	cgcattcggt	ccgcctgtt	cggcgcccg	1080
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<212> DNA

<213> Artificial Sequence

<220>

<223> ARC promoter

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<212> DNA

<213> Artificial Sequence

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<223> UPCM2 cassette sequence

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acgatgacat	tctgctgacc	agattcacgg	tcagcagaat	gtcattcgct	gttccaggat	180
ccggtctgta	acaaagcccg	aaaggaagct	gagttggctg	ctgccaccgc	tgagcaataa	240
ctagcataac	cccttggggc	ctctaaacgg	gtcttgaggg	gttttttgct	gaaaggagga	300
actatatccg	gatatccgc	aagaggcccg	gcagtaccgg	cataaccaag	cctatgccta	360
cagcatccag	ggtgacgggt	ccgaggatga	cgatgagcgc	attgttagat	ttcatacacg	420
gtgectgact	gcgttagcaa	tttaactgtg	ataaaactacc	gcattaaagc	ttatcgatga	480
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gacgatgagg	taccacatcg	tcgtcgttgc	gcactgatga	ggccgtgagg	ccgaaaccct	600
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<212> DNA

<213> Artificial Sequence

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<223> P2CM2 cassette sequence

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cgtgaggacg aaacgatgac attctgctga ccagattcac ggtcagcaga atgtcatcgt	180
cggttccagg atccggctgc taacaaagcc cgaaaggaag ctgagttggc tgctgccacc	240
gtgagcaat aactagcata accccttggg gcctctaaac gggctttgag gggttttttg	300
ctgaaaggag gaactatata cggatatccc gcaagaggcc cggcagtacc ggcataacca	360
agcctatgcc tacagcatcc aggggtgacgg tgccgaggat gacgatgagc gcattgttag	420
atttcataca cggtgectga ctgcgttagc aatttaactg tgataaacta ccgcattaaa	480
gcttatcgat gataagctgt caaacatgag aattcggcgt atacgccgaa tttcaagggt	540
ctgcgcacag acgacgatga ggtaccacat cgtcgtcgtt gcgcaactgat gaggcctga	600
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<223> primer

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<211> 17

<212> DNA

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tacg 64

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<211> 170  
<212> RNA  
<213> Artificial Sequence

<220>  
<223> pClip triple ribozyme

<221> modified\_base  
<222> (1)...(170)  
<223> n=a, c, g, or u

<400> 49  
gcggccgcuc gagcucugau gaguccguga ggacgaaacg guacccggua ccgucagcuc 60  
gagaucunnn nnnncugaug aguccgugag gacgaaannn nnagaucgcu cgacggaucu 120  
agaucggucc ugaugagucc gugaggacga aacggaucug cagcggccgc 170

<210> 50  
<211> 249  
<212> RNA  
<213> Artificial Sequence

<220>  
<223> pChop triple ribozyme

<220>  
<221> modified\_base  
<222> (1)...(249)  
<223> n=a, c, g, or u

<400> 50  
aagcuuugga acccugauga guccgugagg acgaaacgau gacauucugc ugaccagauu 60  
cacggucagc agaaugucau cgucgggucc aggaucnnnn nnncugauga guccgugagg 120  
acgaaannnn nnnnnggaau uccaagggucc ugcgcaacga cgacgaugag guaccacauc 180  
gucgucguug cgcacugaug aggccgugag gccgaaaccc uugacgcguu ccuauccggc 240  
cgucucuaga 249

<210> 51  
<211> 364  
<212> DNA

213> Artificial Sequence

<220>

<223> pSnp ribozyme cassette

<400> 51

aagcttcgag ctctgatgag tccgtgagga cgaaacggta cccggtaccg tcagctcgac	60
ctcagatctc tcgagcaatt gatccgtcga cggatgtaga tccgtcctga tgagtcctgt	120
aggacgaaac ggatctgcag cggatatcca gctttggaac cctgatgagt ccgtgaggac	180
gaaacgatga cattctgctg accagattca cggtcagcag aatgtcatcg tcggttccag	240
gatacttgcc tgaattccaa gggctctgcgc aacgacgacg atgagggtacc acatcgtcgt	300
cgttgcgcac tgatgaggcc gtgaggccga aacccttgac gcgttcctat gcggccgctc	360
taga	364

<210> 52

<211> 685

<212> DNA

<213> Artificial Sequence

<220>

<223> modified pChop cassette

<400> 52

tcagaaaatt attttaaatt tccaattgac attgtgagcg gataacaata taatgtgtgg	60
aagcttatcg ataccgtcga cctcgaagct ttggaacct gatgagtcg tgaggacgaa	120
acgatgacat tctgtgacc agattcacgg tcagcagaat gtcacgtcg gttccaggat	180
ccggtctgcta acaaagcccg aaaggaagct gagttggctg ctgccaccgc tgagcaataa	240
ctagcataac cccttggggc ctctaaacgg gtcttgaggg gttttttgct gaaaggagga	300
actatatccg gatatcccg aagaggcccg gcagtaccgg cataaccaag cctatgccta	360
cagcatccag ggtgacggtg ccgaggatga cgatgagcgc attgttagat ttcatacacg	420
gtgcctgact gcgttagcaa tttaactgtg ataaactacc gcattaaagc ttatcgatga	480
taagctgtca aacatgagaa ttccggcgtat acgccgaatt tcaagggtct gcgcaacgac	540
gacgatgagg taccacatcg tcgtcgttg gcactgatga ggccgtgagg ccgaaacct	600
tgacgcgtaa aaaaaacccg ccccgccggg ttttttacc ttcctatgcg gccgctctag	660
tcgagggggg gcccgctaga actag	685

<210> 53

<211> 216

<212> DNA

<213> Artificial Sequence

<220>

<223> pChop ribozyme cassette

<400> 53

aagcuuugga acccugauga guccgugagg acgaaacgau gacauucugc ugaccagauu	60
cacggucagc agaauugcau cgucgguucc aggauccuug ccugaauucc aaggguucugc	120
gcaacgacga cgaugaggua ccacaucguc gucguugcgc acugaugagg ccgugagggc	180
gaaacecuug acgcguuccu augcggccgc ucuaga	216

<210> 54

<211> 54

<212> DNA

<213> E. coli

<400> 54

agatctaaac gccgatctga tgagtcctg aggacgaaac tttaaaaacc aagg 54

<210> 55

<211> 56

<212> DNA

<213> E. coli

<400> 55

agatctaaac atctcactga tgagtcctg aggacgaaac attacgaaac caaagg 56

<210> 56

<211> 54

<212> DNA

<213> E. coli

<400> 56

agatctaaaa aaaaacctga tgagtcctg aggacgaaac tgggtaaaag atct 54

<210> 57

<211> 54

<212> DNA

<213> E. coli

<400> 57

agatctaaat tatccactga tgagtcctg aggacgaaac gggcgaaaag atct 54

<210> 58

<211> 54

<212> DNA

<213> E. coli

<400> 58

agatctaaat cgttacctga tgagtcctg aggacgaaac taccgaaaag atct 54

<210> 59

<211> 54

<212> DNA

<213> E. coli

<400> 59

agatctaaat gatgttctga tgagtcctg aggacgaaac cacttaaaag atct 54

<210> 60

<211> 54

<212> DNA

<213> E. coli

<400> 60

agatctaaat tttccactga tgagtcctg aggacgaaac gtgcaaaaag atct 54

<210> 61

<211> 55

<212> DNA

<213> E. coli

<400> 61  
 agatctaatt gataccctga tgagtcctg aggacgaaac agtcagaaaa gatct 55

<210> 62  
 <211> 54  
 <212> DNA  
 <213> *E. coli*

<400> 62  
 agatctaaac gttagtctga tgagtcctg aggacgaaac caacaaaacc aagg 54

<210> 63  
 <211> 54  
 <212> DNA  
 <213> *E. coli*

<400> 63  
 agatctaaag gcatcactga tgagtcctg aggacgaaac tgttaaaacc aagg 54

<210> 64  
 <211> 53  
 <212> DNA  
 <213> *E. coli*

<400> 64  
 agatctaaaa gagcgctgat gagtcctgga ggacgaaaca gtcaaaacca agg 53

<210> 65  
 <211> 54  
 <212> DNA  
 <213> *E. coli*

<400> 65  
 agatctaaat ttgatctga tgagtcctg aggacgaaac cagctaaacc aagg 54

<210> 66  
 <211> 53  
 <212> DNA  
 <213> *Streptomyces lividans*

<400> 66  
 agatctaaac tcgtcctgat gagtcctgga ggacgaaacg atcaaaacca agg 53

<210> 67  
 <211> 51  
 <212> DNA  
 <213> *Streptomyces lividans*

<400> 67  
 agatctaaag ggcgctgat agtcctgag gacgaaacgc gaaaaccaag g 51

<210> 68  
 <211> 56  
 <212> DNA  
 <213> *Enterococcus faecalis*

<400> 68

agatctaaaa ctaaagtctg atgagtcctg gaggacgaaa cgagttaaaa ccaagg 56

<210> 69

<211> 57

<212> DNA

<213> *Enterococcus faecalis*

<400> 69

agatctaaag ttttaataact gatgagtcctg tgaggacgaa acttggtcaa accaagg 57

<210> 70

<211> 54

<212> DNA

<213> *Pseudomonas putida*

<400> 70

agatctaaag gtccatctga tgagtcctg aggacgaaac aaagcaaacc aagg 54

<210> 71

<211> 54

<212> DNA

<213> *Pseudomonas putida*

<400> 71

agatctaaac aggttcctga tgagtcctg aggacgaaac aatgtaaacc aagg 54

<210> 72

<211> 54

<212> DNA

<213> *Streptomyces coelicolor*

<400> 72

agatctaaag ctcgatctga tgagtcctg aggacgaaac gaaccaaacc aagg 54

<210> 73

<211> 52

<212> DNA

<213> *Streptomyces coelicolor*

<400> 73

agatctaaac gagtccctgat gagtccctga ggacgaaacc gggaaaccaa gg 52